UNIVERSITY OF LOUISIANA AT LAFAYETTE

GEOL 107 - PHYSICAL GEOLOGY LAB – Syllabus and Schedule

CLASS HOURS: T 1 – 2:50 TEXT: see footnote *

Instructor: Dr. Timothy W. Duex, TA – TBA; OFFICE: MDSN 221A

GRADES: 50 % - weekly quizzes; 50 % - weekly in lab assignments

Week Beginning	Lab #*	Topics
Week # 1	1	Observing and measuring Earth Materials and Processes: Geologic Time; Cycles of Change; Scales of Understanding.
Week # 2	3	Minerals and Mineral Properties; Identification; Uses: Resources & Commodities.
Week # 3	5	Rock Properties: Texture & Composition; Igneous Rocks & Silicate Minerals (Quartz, Plagioclase, Alkali [potassium] Feldspar, Muscovite, Biotite, Amphibole, Pyroxene, Olivine)
Week # 4	6	Sedimentary Rocks: Rock, mineral, and organic fragments: Silicate Minerals (quartz, feldspar, Clays), Carbonates (Calcite, Dolomite), Evaporites (Halite, Gypsum), other Chemical precipitates (Chert, Organics, Ironstone)
Week # 5	7	Metamorphic Rocks: “sparkling” crystals of minerals: platy (muscovite, biotite, chlorite), bladed (kyanite, staurolite), or prismatic (amphiboles, tourmaline, sillimanite).
Week # 6	8	Geologic Time: Relative & Absolute Dating; Unconformities; Cross Sections & Correlation.
Week # 7	9	Topographic Maps, Air Photos, & Satellite Images; Features, Symbols, Colors; Scales & conversion; Contour Lines, Gradient, Relief, Profiles.
Week # 8	12	Ground Water: Processes, Resources, & Risks; Caves & Karst Topography; Subsidence; Water Supply & Quality.
Week # 9	11	Streams, Running Water; Processes & Landscapes; Mass Wastage; Flood Hazards.
Week # 10	14	Deserts & Wind as a Geologic Agent; Landforms, Risks.
Week # 11	13	Glaciers; Processes, Landforms, & Climate Change.
Week # 12	15	Coastal Processes, Landforms, Hazards & Risks; Wetland Loss/Coastal Erosion; Human influence on Shorelines.
Week # 13	10	Deformation; Types of Folds & Faults; Strike & Dip;
Week # 14	16	Earthquakes & the Earth’s Interior; Distribution, Prediction
Week # 15	2	Global Plate Tectonics; Plates, Hot Spots, Causes; Continental Drift Sea-Floor Spreading, Polar Wandering; Mountain Building.

* Laboratory number in your Lab Manual in Physical Geology, 8th ed., R. M. Busch